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| 10/773,649 | 02/06/2004 | Tony T. Coon | 200312026-1 | 7602 |
| 22879 | 7590 | 06/23/2008 | EXAMINER | |
| HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400 | | | NAJEE-ULLAH, TARIQ S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2152 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | |
|------------------------------|---|------------------------------------|
| Office Action Summary | Application No. 10/773,649 | Applicant(s) COON ET AL. |
| | Examiner TARIQ S. NAJEE-ULLAH | Art Unit 2152 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 March 2008.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-50 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08e)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action has been issued in response to Applicant's Amendment filed March 20, 2008. Claims 1-50 are pending in the case. Claims 1-2, 11-12, 15-22, 29, and 31-42 have been amended.
2. The amendment filed March 20, 2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Amendments to claims 1-2, 11-12, 15-22, 29, and 31-42. Examiner requests that Applicant point out explicitly where support for the amended matter exists in the original disclosure. Applicant is required to cancel the new matter in the reply to this Office Action.
3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Response to Arguments

4. The objection to claim 19 due to informalities is withdrawn.
5. Regarding the rejection of claims 11-20, 31-40 under 35 U.S.C. § 101, the amendments to the claims do not overcome the rejection. In view of the Applicant's disclosure as submitted, specification page 27, paragraphs [0056-0057], the "computer readable medium" can be any means that "include, but are not limited to, random access memory, read-only memory (ROM), CD ROM, floppy disks, ... magnetic tape" and "alternatives, modifications, permutations, and equivalents thereof" which would

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fairly suggest to one of ordinary skill in the art *signals or other forms of propagation and transmission media, typewritten or handwritten text on paper, or other items* failing to be an appropriate manufacture under 35 U.S.C. § 101 in the context of computer-related inventions. Applicant has not provided any explicit, deliberate, or limiting definition of the terminology. Examiner maintains rejection of these claims under 35 U.S.C. § 101 as amendments fail to limit claims to embodiments which fall within a statutory category.

6. Regarding the rejection of claims 1-50 under 35 U.S.C. § 102 (b), Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,115,393 to Engel et al (Engel hereinafter) in view of US Patent 6,247,091 to Lovett (Lovett hereinafter).

Examiner interprets "state variable information" and "parameters" in light of the applicant's specification to describe the condition of the protocol stack at a particular instant in time. This information can be indicated by one or more of a protocol identifier,

an address, or a port number. The protocol identifier indicating what type of protocol was used to establish the network connection. Examiner further interprets "protocol engine" to be the means that implements a protocol stack.

Regarding claims 1, 11, 21, 31, and 41, Engel discloses a **method for characterizing a network connection comprising: receiving parameters that specify a network connection** (Col. 2, lines 21-31; Engel discloses monitoring communications which occur in a network of nodes, each communication being effected by a transmission of one or more packets among two or more communicating nodes which are detected passively and in real time, communication information associated with multiple protocols is derived from the packet contents.); **conveying to a protocol engine at least one of the received parameters, wherein the protocol engine is to implement a protocol stack; receiving state variable information from the protocol engine pertaining to the network connection according to the conveyed at least one of the received parameters** (Col. 2, lines 32-41; Engel discloses information about the states of dialogs, i.e. state variable information, occurring in the network is derived from the packet contents.); **sensing when the network connection is initiated according to the received state variable information** (Col. 2, lines 42-45; Engel discloses a current state is maintained for each dialog, and the current state, i.e. state variable information, is updated in response to the detected contents of transmitted packets.); **and storing the state variable information** (Col. 2, lines 45-47; Engel discloses for each dialog, a history of events is maintained, i.e. stored, based on information, i.e. state variable information, derived from the contents of packets). Lovett

teaches **conveying to a protocol engine at least one of the received parameters, wherein the protocol engine is to implement a protocol stack** (figs. 4A, 4B, 5; col. 5, lines 35 - 60).

Engel and Lovett are analogous art because they are from the same field of endeavor of network communications. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Lovett's protocol engine with/as part of Engel's network monitoring system. The suggestion/motivation would have been to have more efficient communication between nodes of a multimode multiprocessor network communication system (Lovett; col. 2, lines 54-61).

Regarding claims 2, 12, 22, 32, and 42, Engel-Lovett discloses the invention substantially as described in claims 1, 11, 21, 31, and 41 above including, **conveying to the protocol engine at least one of the parameters comprises conveying to the protocol engine** (Col. 8, lines 45-65; Engel discloses variable information from the PDU, i.e. protocol engine, that corresponds to the port or connection.) **at least one of a protocol identifier, a source address, a source port, a destination address and a destination port** (Col. 8, lines 35-37, 45-55; Engel discloses a protocol data unit (PDU) to processes protocol stack, i.e. protocol engine, that includes addressing information.).

Regarding claims 3, 13, 23, 33, and 43, Engel-Lovett discloses the invention substantially as described in claims 2, 12, 22, 32, and 42 above including, **wherein sensing when the network connection is initiated comprises monitoring the value of a state variable indicative of the connection state of the connection** (Col. 22,

lines 58-64; Engel discloses a network monitor that monitors the state of the connection based on state information received from both ends of the connection.).

Regarding claims 4, 14, 24, 34, and 44, Engel-Lovett discloses the invention substantially as described in claims 3, 13, 23, 33, and 43 above including, **wherein sensing when the network connection is initiated comprises monitoring the value of a TCP/IP state variable called "STATE"** (Col. 22, lines 3-5; Engel discloses the state to which the node is changed is specified by the S="STATE" entry.).

Regarding claims 5, 15, 25, 35, and 45, Engel-Lovett discloses the invention substantially as described in claims 4, 14, 24, 34, and 44 above including, **sensing when the network connection terminates according to the state variable information** (Col. 11, lines 38-52; Engel discloses a network monitor with a state machine that tracks variable connection states and events, i.e. state variable information. The monitor retrieves this information whether the connection is active or inactive, i.e. the connection terminates.); **retrieving stored state variable information according to the network connection after the network connection terminates** (Col. 11, lines 38-52; Engel discloses a network monitor with a state machine that tracks variable connection states and events, i.e. state variable information. The monitor retrieves this information whether the connection is active or inactive, i.e. the connection terminates.); and **creating a history of the network connection according to the state variable information** (Col. 22, line 65-Col. 23, line 12; Engel discloses there is a history data structure which the state machine uses to remember the current state of the

connection, the state of each of the nodes participating in the connection and a short history of state related information.).

Regarding claims 6, 16, 26, 36, and 46, Engel-Lovett discloses the invention substantially as described in claims 5, 15, 25, 35, and 45 above including, **developing a network connection profile from the state variable information** (Col. 22, line 65-Col. 23, line 12; Engel discloses there is a history data structure which the state machine uses to remember the current state of the connection, the state of each of the nodes participating in the connection and a short history of state related information, i.e. network connection profile.); **and creating a history of the network connection profile** (Col. 22, line 65-Col. 23, line 12; Engel discloses there is a history data structure which the state machine uses to remember the current state of the connection, the state of each of the nodes participating in the connection and a short history of state related information, i.e. network connection profile. Fig. 8 and 9 illustrate a network connection profile.).

Regarding claims 7, 17, 27, 37, and 47, Engel-Lovett discloses the invention substantially as described in claims 6, 16, 26, 36, and 46 above including, **wherein creating a history of the network connection profile comprises detecting an exceptional event** (Col. 24, lines 15-25; Engel discloses the network monitor keeps useful statistics about the connection including any "inconsistencies" or "UNKNOWN" state, i.e. exceptional events, which have occurred over the connection).

Regarding claims 8, 18, 28, 38, and 48, Engel-Lovett discloses the invention substantially as described in claims 7, 17, 27, 37, and 47 above including, **analyzing**

the exceptional event (Col. 24, lines 15-25; Engel discloses the network monitor keeps useful statistics about the connection including any "inconsistencies" or "UNKNOWN" state, i.e. exceptional events, which have occurred over the connection. Col. 24, lines 21-29; Engel discloses how the network monitor analyzes "inconsistencies" and "UNKNOWN" states.).

Regarding claims 9, 19, 29, 39, and 49, Engel-Lovett discloses the invention substantially as described in claims 8, 18, 28, 38, and 48 above including, **retrieving the state variable information while the network connection continues** (Col. 11, lines 38-52; Engel discloses a network monitor with a state machine that tracks variable connection states and events, i.e. state variable information. The monitor retrieves this information whether the connection is active or inactive, i.e. while the network continues.); and **making the state variable information available on a periodic basis** (Col. 12, lines 57-62; Engel discloses a network monitor with an event manager that calculates time averages and performs periodic updates of the monitor's variables.).

Regarding claims 10, 20, 30, 40, and 50, Engel-Lovett discloses the invention substantially as described in claims 9, 19, 29, 39, and 49 above including, **wherein making state variable information available comprises: creating a dynamic profile of the network connection according to the state variable information** (Col. 13, lines 30-32; Engel discloses a network monitor with an address tracking module that keeps track of the node name to node address bindings on networks which implement dynamic node addressing protocols, i.e. creates a dynamic profile of the network

connection according to state variable information.); **and making the dynamic profile available on a periodic basis** (Col. 12, lines 57-62; Engel discloses a network monitor with an event manager that calculates time averages and performs periodic updates of the monitor's variables.).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 5,666,330 to Zampetti.
- US Patent 6,111,893 to Voltsun et al.
- US Patent 6,151,390 to Voltsun et al.
- US Patent 6,499,107 to Gleichauf et al.
- US Patent 6,741,610 to Voltsun et al.
- US Patent 6,816,973 to Gleichauf et al.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TARIQ S. NAJEE-ULLAH whose telephone number is (571)270-5013. The examiner can normally be reached on Monday through Friday 8:30 - 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T. N.

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2146